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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,230	11/25/2003	Eugene F. Giszczynski	2376.2142-001	6692
57690 7590 07/22/2008 HAMILTON, BROOK, SMITH & REYNOLDS, P.C. 530 VIRGINIA ROAD P.O. BOX 9133 CONCORD, MA 01742-9133				
EXAMINER				
ZHU, BO HUI ALVIN				
ART UNIT		PAPER NUMBER		
2619				
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07/22/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/722,230

**Applicant(s)**

GISZCZYNSKI ET AL.

**Examiner**

BO HUI A. ZHU

**Art Unit**

2619

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 February 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 18-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. The amendment filed on February 27, 2008 has been received. Claims 18 - 38 are pending in the application. No amendments to the claims have been made.

### ***Claim Rejections - 35 USC § 103***

2. Claims 18, 19, 21 - 26, 28 - 32 and 34 - 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huey et al. (US 5,467,349).

(1) with regard to claims 18 and 31:

Huey et al. discloses a method for monitoring a virtual path (see column 6, lines 23 - 49 and Fig. 7) comprising: originating at least one of operations, administrative and maintenance calls (virtual channel between 176 and 172 on Fig. 7; column 6, lines 32 - 38) at a source network element (176 on Fig. 7) on the virtual path (178 on Fig. 7); and monitoring for the at least one of the operations, administrative and maintenance calls at the source network element on the virtual path (monitoring circuit at 176; column 6, lines 46 - 49).

Huey et al. does not disclose the method being applied in a ring network.

Huey et al. however discloses in admitted prior art (Fig. 1) a ring network (10 on Fig. 1) that comprises ATM switches.

It would have been desirable to apply the method disclosed by Huey et al. in a ring network because it would eliminate the possibility of having a single point of failure in the network. Therefore, it would have been obvious to one of ordinary skill in the art

at the time of the invention to implement the method as taught by Huey et al. into a ring network so as to eliminate the possibility of having single point of failure in the network.

(2) with regard to claims 19, 26 and 32:

Huey et al. further discloses originating a second at least one of operations, administrative and maintenance calls (virtual channel between 176 and 174 on Fig. 7) at an intermediate network element (174 on Fig. 7; with the add/drop method of Huey et al, 174 can add or drop a virtual circuit by itself) on the virtual path (178 on Fig. 7); and monitoring for the second at least one of the operations, administrative and maintenance calls at the source network element on the virtual path (monitoring circuit at 176, column 6, lines 46 – 49).

It would have been desirable to apply the method disclosed by Huey et al. in a ring network because it would eliminate the possibility of having a single point of failure in the network. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the method as taught by Huey et al. into a ring network so as to eliminate the possibility of having single point of failure in the network

(3) with regard to claims 21, 28 and 34:

Huey et al. further discloses that the virtual path is unidirectional (see column 2, lines 39 - 40).

(4) with regard to claims 22, 24 and 29:

Huey et al. further discloses that assigning the at least one of operations, administrative and maintenance calls and the second at least one of operations,

administrative and maintenance calls, to the virtual path (virtual path 178 is used for transmitting cells).

It would have been desirable to apply the method disclosed by Huey et al. in a ring network because it would eliminate the possibility of having a single point of failure in the network. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the method as taught by Huey et al. into a ring network so as to eliminate the possibility of having single point of failure in the network

(5) with regard to claims 23, 25, 30, 36 and 38:

Huey et al. discloses in the add/drop method checking cells arrived at the source network element to find the at least one of operations, administrative and maintenance calls (see column 6, line 50 – column 7, line 14 and Fig. 8, which discloses the process for checking arrival cells that belong to different connections)

It would have been desirable to apply the method disclosed by Huey et al. in a ring network because it would eliminate the possibility of having a single point of failure in the network. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the method as taught by Huey et al. into a ring network so as to eliminate the possibility of having single point of failure in the network

(6) with regard to claims 35 and 37:

Huey et al. discloses a ring network (10 in Fig. 1) and in the add/drop method discloses using a single virtual path (178 on Fig. 7) to connect all ATM switches in a network (172, 174, 176 on Fig. 7); and the intermediate network element (178 on Fig. 7)

is able to add virtual connection to the virtual path that terminates at the source network element (176 on Fig. 7).

It would have been desirable to apply the method disclosed by Huey et al. in a ring network because it would eliminate the possibility of having a single point of failure in the network. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to implement the method as taught by Huey et al. into a ring network so as to eliminate the possibility of having single point of failure in the network.

3. Claims 20, 27 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huey et al. (US 5,467,349) in view of Cappellari et al. (US 5,557,611).

(1) with regard to claims 20, 27 and 33:

Huey et al. does not disclose performing statistical multiplexing on the virtual path.

Cappellari et al. teaches using statistical multiplexing (see column 4, lines 37 – 43).

It would have been desirable to use statistical multiplexing technique because it would provide a saving on the bandwidth assigned to the virtual paths. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use statistical multiplexing method as taught by Cappellari et al. in the system of Huey et al. so as to improve bandwidth efficiency.

***Response to Arguments***

4. In response to the 103 rejections of claims 18, 26 and 31, Applicants argue that Huey does not disclose "a virtual path in a ring configuration," "originating at least one of the operations, administrative and maintenance calls at a source network element on the virtual path, " and "monitoring for the at least one of operations, administrative and maintenance calls at the source network element on the virtual path," as claimed in claim 18, and similarly claimed in claims 26 and 31. Examiner respectfully disagrees. Huey discloses all of these limitations in column 6, lines 30 – 49 and Fig. 7. In Fig. 7, a virtual path (178) is used to carry virtual channels to manage the communication between three ATM switches (172, 174 and 176) with VPC monitoring circuits needed to be used at ATM switches 174 and 176. In view of Huey, Applicants argue that the virtual path 178 would start at one ATM switch (e.g. 176) and end at a different ATM switch (e.g. 172). As explained in Examiner's rejection, Huey's exemplary system in Fig. 7 does not demonstrate the virtual path (178) being configured in a ring configuration. However, Huey discloses a ring network (shown in Fig. 1) which shows ATM switches being connected by a virtual path (14) in a ring configuration for transferring high speed data traffic between end users (16). Such configuration (ring) of the ATM switches would be beneficial because it enhances the reliability of a network by eliminating the possibility of having single point of failure in the network. The network of ATM switches in Fig. 7 when modified to be constructed in a ring as is shown in Fig. 1 would have the virtual path (178) starting at ATM switch (176) and ending at the same ATM switch (176).

***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BO HUI A. ZHU whose telephone number is (571)270-1086. The examiner can normally be reached on Mon-Thur 10am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571)272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2619

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BZ  
Examiner  
June 27, 2008

/Hassan Kizou/  
Supervisory Patent Examiner, Art Unit 2619